

REMARKS

In the Office Action of October 20, 2005, claim 1 was rejected under 35 U.S.C. 103(a) as unpatentable over P. Rothman, Nonlinear Time Series Analysis of Economic and Financial Data (Kluwer Academic Publishers, 1999) in view of Asherman et al. (U.S. Patent No. 6,384,748) in further view of G. Bilson, "Adapting Formal Testing Technique for Windows Applications," Microsoft Systems Journal, Vol. 7, No. 1, p.77 (20) Jan.-Feb., 1992.

In addition, claim 1 was rejected under 35 U.S.C. 112, first paragraph for failing to meet the enablement requirement. In particular, the phrase "domain error" was allegedly not described or defined in the specification.

The drawings were also objected to because they failed to include the term "Information 38." In response, Fig. 3 has been corrected and a corrected drawing sheet is enclosed herewith.

With respect to the rejection under 35 U.S.C. 112, first paragraph, the Examiner's attention is directed to paragraph 0284 of the published application (page 40, line 15 of the specification as filed) which states: "A domain error: an illegal level p of the filtered variable, i.e., $p < P_{\min}$ (as opposed to a merely implausible level)." Examples of domain errors in the case of bid-ask quotes are identified in paragraphs 0287, 0288, 0289 and 1292: $p_{\text{bid}} < p_{\min}$, $p_{\text{ask}} < p_{\min}$, $p_{\text{ask}} < p_{\text{bid}}$, $p_{\text{ask}} < p_{\text{bid}}$.

In view of the foregoing usage of the phrase "domain error" in the specification, it is respectfully submitted that the rejection under 35 U.S.C. 112, first paragraph should be withdrawn.

Likewise, the rejection under U.S.C. 103(a) should be withdrawn. The Examiner acknowledges that Rothman does not disclose testing data for decimal, scaling and domain errors. The Examiner relies on Asherman for disclosing testing for decimal point and scaling

error and on Bilson for disclosing testing for domain errors. However, while Bilson may refer to something called domain testing, that is not the same as what applicant means by testing for domain errors as described above; and Asherman's testing for decimal points is not the same as what applicant means by testing for decimal errors.

The Examiner has indicated that she has interpreted "domain error" as an error in defining a variable. However, as set forth in applicant's paragraph 0284 a domain error is not an error in defining a variable but rather is an illegal level of the variable. Moreover, the Bilson reference on which the Examiner relies for this part of the rejection is directed to the testing of computer programs, specifically Microsoft Windows, and not to the testing of time series data.

The description of domain testing appears to begin in the third paragraph of page 4 of the print-out of the Bilson reference. The following excerpts describe Bilson's domain testing as a procedure for testing computer programs:

Domain testing is a testing technique that views programs as groups of processes that categorize input data. All inputs that a program may process are partitioned into domains. . . .

Windows can send input from a variety of sources to the WinProc. . . . These inputs can all be viewed as numbers. . . . These inputs are grouped into domains based on the processing done by your application. . . .

Domain testing looks for bugs in the definition of domains. A bug may mean that the boundaries of a domain are wrong due to errors in conditional expressions or other control flow statements that specify what numbers belong in the domain. Common domain errors are contradictory domains, ambiguous domains, and overspecified domains (where the domain is null).

From the foregoing it is evident that Bilson's domain testing is not the same thing as testing for illegal levels in time series data and that Bilson does not suggest such testing.

In addition, there is no suggestion in either Rothman or Bilson that these references be combined. Rothman is an economics book. The section of Rothman that is relied on by the Examiner relates to data outliers. Bilson is directed to testing software programs for errors.

There is no suggestion that these references be combined or how that might be done. And even if the references were somehow combined, they still would not correct for illegal levels in time series data as claimed by applicant.

Similarly, the reliance on Asherman for disclosing applicant's testing for decimal errors is misplaced. The testing of decimal errors is described in paragraphs 0323-0344 of the published application (page 44 to 48 of the specification). As explained in paragraph 0324, a decimal error can occur when cache memories are updated by partial updates rather than full refreshment of data and a specific example of a decimal error is described in paragraph 0325. If a partial update message is lost, the portion remaining in the cache may no longer be correct and subsequent quotes may be in error. Such errors are called decimal errors in the specification.

Contrary to the Examiner's assertion, Asherman does not disclose or suggest a method for correcting for errors at all. Asherman is directed to a method for encoding data. As indicated in the Abstract, the first character of the data string represents the sign, the second character the exponent, the following characters the mantissa and the last character is a termination character. The mantissa is in the form of a single numeric value followed by a decimal point and additional numeric values.

The disclosure on which the Examiner relies relates to the addition or subtraction of numbers and teaches the need to align decimal points in the numbers being added or subtracted. This is a method for avoiding errors in mathematical computations. It is not a method for correcting for errors already present in data and not a method for correcting for errors already present in time series data as claimed. Moreover, while Asherman may teach the alignment of decimal points in his computation, he does not teach or suggest the correction of decimal errors as that term has been defined by the applicant.

Finally, there is no suggestion in Rothman or Asherman that the references should be combined. As noted above, Rothman is an economics text. Asherman discloses a method of encoding data and manipulating the encoded date. There is no suggestion that the references be combined or how that might be done. And if the references were somehow combined, they still would not teach or suggest the method for correcting for decimal errors in time series data as claimed by applicant.

Several additional claims have been added to the application. Each of these claims is directed to a method of testing at least decimal error and credibility and is believed patentable for the reasons set forth above. Some instances of support for the newly added claims are as follows:

<u>claim</u>	<u>paragraph of published application</u>
2, 13	379-398
3, 14	399-419
4, 16	328
5, 17	329
6	329
7, 18	330
8, 19	331
9	276-293
10, 15	190-198
11	322-344; 0090-0096
12	276-293; 420-458

Copies of several of the references cited at paragraphs 523 to 528 have been provided under an IDS.

Aside from the fee for an extension of time, no additional fee is believed to be due for filing this response. However, if a fee is due, please charge such fee to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310.

If the Examiner believes a telephone interview would expedite prosecution of this application, she is invited to call applicant's attorney at the number given below.

Date April 20, 2006

Respectfully submitted,

A handwritten signature in cursive script that reads "Francis E. Morris". The signature is written in dark ink and is positioned above a horizontal line.

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